

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2004-18601; Directorate Identifier 2004-NM-34-AD; Amendment 39-13933; AD 2005-01-09]**

**RIN 2120-AA64**

**Airworthiness Directives; Boeing Model 747-100, -200B, -200F, -200C, -100B, -300, -100B SUD, -400, -400D, -400F, and 747SR Series Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

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**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 747 series airplanes. This AD requires a one-time inspection for discrepancies of the frame web and inner chords on the forward edge frame of the number 5 main entry door cutout, and related corrective action. This AD is prompted by a report of cracking of the frame web and inner chords on the forward edge frame of the number 5 main entry door. We are issuing this AD to find and fix discrepancies of the frame web and inner chords, which could result in cracking, subsequent severing of the frame, and consequent rapid depressurization of the airplane.

**DATES:** This AD becomes effective February 11, 2005.

The incorporation by reference of certain publications listed in the AD is approved by the Director of the Federal Register as of February 11, 2005.

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, PO Box 3707, Seattle, Washington 98124-2207. You can examine this information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

*[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).*

You can examine the contents of this AD docket on the Internet at *<http://dms.dot.gov>*, or at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, on the plaza level of the Nassif Building, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:**

Technical information: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6437; fax (425) 917-6590.

Plain language information: Marcia Walters, [marcia.walters@faa.gov](mailto:marcia.walters@faa.gov).

**SUPPLEMENTARY INFORMATION:** The FAA proposed to amend 14 CFR Part 39 with an AD for certain Boeing Model 747 series airplanes. That action, published in the Federal Register on July 15, 2004 (69 FR 42365), proposed to require a one-time inspection for discrepancies of the frame web and inner chords on the forward edge frame of the number 5 main entry door cutout, and related corrective action.

**Examining the Docket**

The AD docket contains the proposed AD, comments, and any final disposition. You can examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the ADDRESSES section.

**Comment**

We provided the public the opportunity to participate in the development of this AD. We have considered the single comment that has been submitted on the proposed AD.

**Request To Change Paragraph (g)**

The commenter (the manufacturer) asks that paragraph (g) of the proposed AD be changed to read "For those airplanes on which the repetitive inspections required by AD 2001-16-02, amendment 39-12370, have been done as of the effective date of this AD, no further action is required." The commenter states that the inspection required by AD 2001-16-02 (referenced as a related AD in the proposed AD) is a surface eddy current inspection and is more intensive than the detailed inspection specified in the proposed AD. The commenter notes that the repetitive inspections in AD 2001-16-02 adequately detect any cracking prior to loss of residual strength of the chord. The commenter adds that a nick or gouge does not affect the crack growth rate, so the safety concern in the proposed AD is addressed by the repetitive inspections.

We agree with the commenter. The repetitive inspections for cracking required by AD 2001-16-02 are more extensive than the one-time inspection required by this AD, and must be repeated at intervals not to exceed 3,000 flight cycles. Initiating those inspections will find cracking before it reaches critical length; therefore, the one-time inspection required by this AD is not necessary if the repetitive inspections are currently being done. For airplanes that are at or near the 10,000-flight-cycle threshold, and have not been inspected per AD 2001-16-02, the purpose of this AD is to close the gap between the compliance time for the initial inspection required by AD 2001-16-02 (before the accumulation of 16,000 total flight cycles) and the one-time inspection required by this AD. The AD requires that operators inspect the airplane at or before 10,000 total flight cycles, or within the specified grace period. Therefore, paragraph (g) of this AD has been changed to specify that operators currently accomplishing the repetitive inspections required by AD 2001-16-02 are not required to accomplish the one-time inspection required by this AD.

## **Conclusion**

We have carefully reviewed the available data, including the comment that has been submitted, and determined that air safety and the public interest require adopting the AD with the change described previously. We have determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

## **Costs of Compliance**

There are about 1,055 airplanes worldwide of the affected design, this AD affects about 220 airplanes of U.S. registry. The inspection takes about 2 work hours per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the inspection required by this AD for U.S. operators is \$28,600, or \$130 per airplane.

## **Authority for This Rulemaking**

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.

## **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD. See the ADDRESSES section for a location to examine the regulatory evaluation.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39–AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2005-01-09 Boeing:** Amendment 39-13933. Docket No. FAA-2004-18601; Directorate Identifier 2004-NM-34-AD.

## Effective Date

- (a) This AD becomes effective February 11, 2005.

## Affected ADs

- (b) Accomplishing this AD will not terminate the repetitive inspections required by AD 2001-16-02, amendment 39-12370.

## Applicability

- (c) This AD applies to Boeing Model 747-100, -200B, -200F, -200C, -100B, -300, -100B SUD, -400, -400D, -400F, and 747SR series airplanes; line numbers 1 through 1333 inclusive; certificated in any category.

## Unsafe Condition

- (d) This AD was prompted by a report of cracking of the frame web and inner cords on the forward edge frame of the number 5 main entry door. We are issuing this AD to find and fix discrepancies of the frame web and inner cords, which could result in cracking, subsequent severing of the frame, and consequent rapid depressurization of the airplane.

## Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

## One-Time Inspection

- (f) For airplanes on which the repetitive inspections required by AD 2001-16-02 have not been accomplished as of the effective date of this AD: Do a one-time detailed inspection for discrepancies (nicks, scratches, and/or gouges) of the frame web and inner cords (forward and aft) of the forward edge frame of the number 5 main entry door cutout, by doing all the applicable actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2494, dated September 18, 2003. Do the inspection at the latest of the times specified in paragraphs (f)(1), (f)(2), and (f)(3) of this AD.

- (1) Before the accumulation of 10,000 total flight cycles.
- (2) Within 1,500 flight cycles after the effective date of this AD.
- (3) Within 24 months after the effective date of this AD.
- (g) For airplanes on which the repetitive inspections required by AD 2001-16-02 have been accomplished as of the effective date of this AD: No further action is required by this AD.

**Note 1:** For the purposes of this AD, a detailed inspection is: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

### **Related Corrective Action**

(h) If any discrepancy is found during the inspection required by paragraph (f) of this AD: Before further flight, do all the related corrective actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2494, dated September 18, 2003. Where the service bulletin specifies contacting the manufacturer for disposition of certain repair conditions, repair before further flight per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved, the approval must specifically refer to this AD.

### **Alternative Methods of Compliance (AMOCs)**

(i)(1) The Manager, Seattle ACO, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the approval must specifically refer to this AD.

### **Material Incorporated by Reference**

(j) You must use Boeing Alert Service Bulletin 747-53A2494, dated September 18, 2003, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approves the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. For copies of the service information, contact Boeing Commercial Airplanes, PO Box 3707, Seattle, Washington 98124-2207. For information on the availability of this material at the National Archives and Records Administration (NARA), call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). You may view the AD docket at the Docket Management Facility, Department of Transportation, 400 Seventh Street SW., room PL-401, Nassif Building, Washington, DC.

Issued in Renton, Washington, on December 27, 2004.

Kevin M. Mullin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-160 Filed 1-6-05; 8:45 am]

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